## **CLAIMS**

1. Reducing composition for bleaching or permanently reshaping keratin fibres, comprising at least one reducing agent, characterized in that it comprises at least one compound corresponding to formula (I) below:

 $R-N-(CH(R')CO_2X)_2$  (I)

## 10 in which:

- R represents a hydrogen atom or a group  $-CH(CO_2X) (CH_2)_2CO_2X$ ,  $-CH_2-CH_2-OH$ ,  $-CH(CH_3)-CO_2X$  or  $-(CH_2)_2-N(COR'')-CH_2-CO_2X$ ;
- R" represents a linear or branched alkyl group
  containing from 1 to 30 carbon atoms, or a cycloalkyl group containing from 3 to 30 carbon atoms;
  - R' represents a group  $-CH_2CO_2X$  when R represents a hydrogen atom, whereas R' represents a hydrogen atom when R is other than a hydrogen atom; and
- Y represents a hydrogen atom or a monovalent or divalent cation derived from an alkali metal, from an alkaline-earth metal, from a transition metal or from an organic amine, or an ammonium cation.
- 2. Composition according to Claim 1, in which the monovalent or divalent cation is chosen from the group consisting of alkali metal cations, alkalineearth metal cations, divalent transition metal cations and monovalent cations derived from organic amines or from ammonium.
- 3. Composition according to Claim 1 or Claim 2, characterized in that the compound(s) of formula (I) is(are) chosen from the group consisting of methylglycine diacetic acid, 2-hydroxyethylimino

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diacetic acid, N-lauroyl-N,N',N'-ethylenediamine triacetic acid, iminodisuccinic acid and N,N-dicarboxymethyl-L-glutamic acid, the alkali metal salts thereof, the alkaline-earth metal salts thereof, the transition metal salts thereof, and mixtures thereof.

- 4. Composition according to any one of the preceding claims, characterized in that the compound(s) of formula (I) is(are) chosen from the group consisting of 2-hydroxyethylimino diacetic acid and methylglycine diacetic acid and the sodium salts thereof, and mixtures thereof.
- 5. Composition according to any one of the preceding claims, characterized in that the compound(s) of formula (I) represent(s) from 0.001% to 10% by weight relative to the total weight of said composition.

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6. Composition according to any one of the preceding claims, characterized in that the compound(s) of formula (I) represent(s) from 0.001 to 5% by weight relative to the total weight of said composition.

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- 7. Composition according to any one of the preceding claims, characterized in that the reducing agent(s) is(are) chosen from the group consisting of reductones and the salts and esters thereof, sulphites and sulphinates.
- 8. Composition according to any one of Claims 1 to 6, characterized in that the reducing agent(s) is(are) chosen from the group consisting of

thiols and the salts and esters thereof, sulphites and sulphinates.

- 9. Composition according to Claim 8, characterized in that the reducing agent(s) is(are) chosen from the group consisting of thioglycolic acid, thiolactic acid, cysteamine and cysteine, and the salts and esters thereof.
- 10. Composition according to any one of the preceding claims, characterized in that the reducing agent(s) represent(s) from 0.1% to 30% by weight relative to the total weight of said composition.
- 11. Composition according to any one of the preceding claims, characterized in that the reducing agent(s) represent(s) from 0.5% to 20% by weight relative to the total weight of said composition.
- 20 12. Composition according to any one of the claims, characterized in that it preceding comprises one or more cationic or amphoteric conditioning polymers, in proportions of from 0.01% to 10% by weight and preferably from 0.05% to 5% by weight 25 relative to the total weight of said composition.
  - 13. Composition according to any one of the preceding claims, characterized in that it also comprises one or more nonionic, anionic, cationic or amphoteric amphiphilic polymers, comprising a hydrophobic chain, in proportions of from 0.05% to 20% by weight and preferably from 0.1% to 10% by weight relative to the total weight of said composition.

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- 14. Composition according to any one of the preceding claims, characterized in that it also comprises one or more surfactants, in proportions of from 0.01% to 40% by weight and preferably from 0.1% to 30% by weight relative to the total weight of said composition.
- 15. Composition according to any one of the characterized in that preceding claims, 10 comprises one or more rheology modifiers other than the nonionic, anionic, cationic or amphoteric amphiphilic polymers, comprising hydrophobic а chain, proportions of from 0.05% to 20% by weight and preferably from 0.1% to 10% by weight relative to the 15 total weight of said composition.
  - 16. Composition according to any one of the preceding claims, characterized in that it also comprises one or more acidifying or basifying agents, in proportions of from 0.01% to 30% by weight relative to the total weight of said composition.
  - 17. Composition according to any one of the preceding claims, characterized in that it comprises one or more solvents chosen from the group consisting of water and mixtures composed of water and of or more cosmetically acceptable solvents, this or these solvent(s) representing from 0.5% to 20% by weight and preferably from 2% to 10% by relative to the total weight of said weight composition.
- 18. Composition according to any one of the preceding claims, characterized in that it also comprises one or more adjuvants chosen from the group

consisting of mineral or organic fillers, binders, lubricants, antifoams, silicones, dyes, matting agents, preserving agents and fragrances.

- 19. Process for bleaching or permanently reshaping keratin fibres, comprising the steps consisting in:
  - a) applying to the keratin fibres a reducing composition according to any one of Claims 1 to 18:
  - b) leaving the reducing composition to stand on the keratin fibres for a time that is sufficient to obtain the desired bleaching or permanent reshaping;
- 15 c) rinsing the keratin fibres to remove the reducing composition therefrom;
  - d) washing the keratin fibres one or more times, rinsing them after each wash, and optionally drying them;
- 20 said process also comprising, between steps c) and d), the case of a permanent reshaping, the consisting in: i) applying an oxidizing composition to the keratin fibres; ii) leaving the oxidizing composition to stand on the keratin fibres for a time 25 that is sufficient to obtain the desired reshaping; and iii) rinsing the keratin fibres with water to remove the oxidizing composition therefrom.
- 20. Device or "kit" for bleaching keratin 30 fibres, comprising at least two compositions A and B intended to be mixed together to obtain a ready-to-use reducing composition, characterized in that at least one of the compositions A and B contains one or more reducing agents and at least one of the compositions A

and B contains one or more compounds corresponding to the general formula (I) below:

$$R-N-(CH(R')CO_2X)_2$$
 (I)

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in which:

- R represents a hydrogen atom or a group  $-CH(CO_2X) (CH_2)_2CO_2X$ ,  $-CH_2-CH_2-OH$ ,  $-CH(CH_3)-CO_2X$  or  $-(CH_2)_2-N(COR'')-CH_2-CO_2X$ ;
- R" represents a linear or branched alkyl group containing from 1 to 30 carbon atoms, or a cycloalkyl group containing from 3 to 30 carbon atoms;
  - R' represents a group  $-CH_2CO_2X$  when R represents a hydrogen atom, whereas R' represents a hydrogen atom when R is other than a hydrogen atom; and
  - X represents a hydrogen atom or a monovalent or divalent cation derived from an alkali metal, from an alkaline-earth metal, from a transition metal or from an organic amine, or an ammonium cation.

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"kit" for 21. Device or permanently reshaping keratin fibres, comprising, firstly, either a composition A or at least two compositions A' and B' intended to be mixed together to obtain a ready-to-use reducing composition, and, secondly, a ready-to-use oxidizing composition C or at least two compositions D and E intended to be mixed together to obtain a readyto-use oxidizing composition, said device being characterized in that either composition A or at least one of the compositions A' and B' contains one or more reducing agents, and either composition A or at least one of the compositions A' and B' contains at least one or more compounds corresponding to the general formula (I) below:

35  $R-N-(CH(R')CO_2X)_2$  (I)

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## in which:

- R represents a hydrogen atom or a group  $-CH\left(CO_2X\right)-\left(CH_2\right){}_2CO_2X\text{, }-CH_2-CH_2-OH\text{, }-CH\left(CH_3\right)-CO_2X\text{ or }-\left(CH_2\right){}_2-N\left(COR''\right)-CH_2-CO_2X\text{;}$
- R" represents a linear or branched alkyl group containing from 1 to 30 carbon atoms, or a cycloalkyl group containing from 3 to 30 carbon atoms;
- R' represents a group  $-CH_2CO_2X$  when R represents a hydrogen atom, whereas R' represents a hydrogen atom when R is other than a hydrogen atom; and
  - X represents a hydrogen atom or a monovalent or divalent cation derived from an alkali metal, from an alkaline-earth metal, from a transition metal or from an organic amine, or an ammonium cation.
- 22. Use of a composition according to any one of Claims 1 to 18, or of a process according to Claim 19, or of a device according to Claim 20 or Claim 20 21, for bleaching or permanently reshaping human keratin fibres and more especially the hair.